

MEPA ENVIRONMENTAL ASSESSMENT SUMMARY FORM

Project Name: Middle Creek Project Cottonwood Flume Replacement

Proposed Implementation Date: August 2016

Proponent: DNRC – State Water Projects Bureau

Type and Purpose of Action: The Cottonwood Flume is a 1054-foot long composite water conveyance structure, split in two sections, located on the Cottonwood Canal. The canal, a component of the Middle Creek Water Project, serves as an irrigation water delivery source for the Middle Creek Water User Association. In the spring of 2014, 175 feet of the flume structure failed as a result of large amounts of snow/ice and precipitation weight build up. Based on the engineering evaluations, it was determined that the flume needs repair or replacement to keep the water delivery system serviceable. The action alternative calls for replacing the entire flume in kind.

Location: T3S, R5E; Section 14

County: Gallatin

I. PROJECT DEVELOPMENT

RESOURCE	POTENTIAL IMPACTS AND MITIGATION
1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED: Provide a brief summary of the scoping and ongoing involvement for this project.	Inspections by SWPB and a contracted engineering consulting firm indicated that the structure was in need of significant repair or replacement. Groups/agencies involved and/or contacted include: <ul style="list-style-type: none">• Middle Creek Water Users Association• MT Fish, Wildlife and Parks• MT Dept. of Environmental Quality• Land owner of the project location
2. OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED:	The project is located entirely on private land. The DNRC SWPB possesses a permanent easement for the canal. No other government agencies have jurisdiction. MT DEQ and MT DFWP were consulted and no permits are needed for the project.
3. ALTERNATIVES CONSIDERED:	Action Alternative: Proceed with the flume replacement. No Action Alternative: Do not proceed with the replacement. The failed section of the canal was replaced last year and other repairs were made. The canal is currently operational. The consequence of no action is that the flume will continue to deteriorate and eventually fail, thereby making the canal inoperable.

II. IMPACTS ON THE PHYSICAL ENVIRONMENT

4. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:

Are fragile, compatible or unstable soils present?

Are there unusual geologic features?

Are there special reclamation considerations?

The area of impact contains soils of the Mollic Cryoboralfs complex, with slopes ranging from 5 to 60%. These soils are not fragile or unstable. There are no unusual geologic features or any special reclamation considerations.

Action Alternative: The replacement of the flume will involve making repairs to the existing foundations. Only minor soil disturbance is anticipated. No significant or adverse impacts are expected.

No Action Alternative: No action alternative will have a negative impact. If the flume leaks it could create localized erosion; if it fails severe erosion.

5. WATER QUALITY, QUANTITY AND DISTRIBUTION:

Are important surface or groundwater resources present?

Is there potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality?

There are no important surface or groundwater resources present in the project location. Middle Creek lies to the east of the flume and will not be impacted by the construction. The construction will have no effect on water quality standards in the area.

Action Alternative: Installation of the replacement flume will have no impact on drinking or ambient water quality in the area.

No Action Alternative: Under this alternative, there will be no impacts to water quality and quantity. The delivery of irrigation water could be negatively affected if the canal becomes inoperable due to flume deterioration.

<p>6. AIR QUALITY:</p> <p>Will pollutants or particulate be produced?</p> <p>Is the project influenced by air quality regulations or zones (Class I air shed)?</p>	<p>Action Alternative: Any impacts would be related to emissions from construction equipment and would be non-significant, minor, short-term, temporary, and end with the completion of the project. The project area is not influenced by any special air quality regulations.</p> <p>No Action Alternative: Under this alternative there will be no impacts to air quality.</p>
<p>7. VEGETATION COVER, QUANTITY AND QUALITY:</p> <p>Will vegetative communities be permanently altered?</p>	<p>The current vegetative community consists of common native grasses, forbs, woody shrubs and a mix of coniferous and deciduous trees (Rocky Mountain Douglas-fir Forest and Woodland classification).</p> <p>Action Alternative: There may be some clearing and widening of the access route to allow for equipment ingress and egress. This will increase the possibility for noxious weed introductions. Any adverse impacts are non-significant, very small and localized. Disturbed areas will be reclaimed and reseeded after the project is completed with a suitable native seed mix. The vegetative community should see very little alteration after reseeded.</p> <p>No Action Alternative: Under this alternative there will be no impacts to the plant communities.</p>
<p>8. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:</p> <p>Is there substantial use of the area by important wildlife, birds or fish?</p>	<p>The area contains habitat for common wildlife and aquatic species.</p> <p>Action Alternative: The site may see a slight disturbance in habitat quality during the reconstruction of the flume. These impacts are non-significant, minor, short-term and non-significant.</p> <p>No Action Alternative: Under this alternative there will be no impacts.</p>

<p>9. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:</p> <p>Are any federally listed threatened or endangered species or identified habitat present?</p> <p>Any wetlands?</p> <p>Any sensitive species or Species of Special Concern?</p>	<p>The project is in an area listed as habitat for the following State Species of Special Concern: Fauna: Northern Goshawk, Great Grey Owl, Brown Creeper, Pacific Wren, Westslope Cuthroat Trout, Grizzly Bear, Wolverine and Canada Lynx. The Lynx and Grizzly Bear are also federally listed under the Endangered Species Act (ESA). Flora State Species of Special Concern: Spragues Pipit, Whitebark Pine. These two species are also federal ESA candidate species. There are no wetlands on the project site.</p> <p>Action Alternative: The flume replacement will have no impact on unique, endangered, fragile or limited environmental resources.</p> <p>No Action Alternative: Under this alternative there will be no impacts.</p>
<p>10. HISTORICAL / ARCHAEOLOGICAL :</p> <p>Are any historical, archaeological or paleontological resources present?</p>	<p>Action Alternative: The immediate area of impact contains no known historical, archaeological or paleontological resources. The DNRC Archeologist was consulted and stated that this area is well documented. Any new historical/archaeological/paleontological resources uncovered during construction would be reported to the DNRC Archeologist and the SHPO.</p> <p>No Action Alternative: There will be no impacts to historical/archaeological/paleontological resources under this alternative.</p>
<p>11. AESTHETICS:</p> <p>Is the project on a prominent topographic feature?</p> <p>Will it be visible from populated or scenic areas?</p> <p>Will there be excessive noise or light?</p>	<p>The project location and access is located on private land. The site is nominally visible from nearby county roads, and the public generally cannot see the area, due to there being no legal public access to the site.</p> <p>Action Alternative: Any increase in noise associated with the construction would be non-significant, temporary, and end with completion of the project. The flume replacement will have no impact on the aesthetics of the area.</p> <p>No Action Alternative: Under this alternative there will be no impacts to aesthetics.</p>

<p>12. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY:</p> <p>Will the project use resources that are limited in the area?</p> <p>Are there other activities nearby that will affect the project?</p>	<p>Action Alternative: The flume replacement would not change the existing demand/use of water in the area. There are no other activities nearby that would affect the project.</p> <p>No Action Alternative: Under this alternative there will be no new demands placed on environmental resources of land, water, air or energy.</p>
<p>13. OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA:</p> <p>Are there other studies, plans or projects on this site?</p>	<p>Action Alternative: This project will not impact any other plans or studies.</p> <p>No Action Alternative: Under this alternative there will be no impacts.</p>

III. IMPACTS ON THE HUMAN POPULATION

<p>14. HUMAN HEALTH AND SAFETY:</p> <p>Will this project add to health and safety risks in the area?</p>	<p>Action Alternative: During installation, there may be inherent safety risks normally associated with construction projects. OSHA and State safety standards, rules and regulations will apply, thereby reducing and health and safety risks to non-significant levels. Any risks would be minor, temporary and end with the completion of the project</p> <p>No Action Alternative: Under this alternative there will be no impacts to human health or safety.</p>
<p>15. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION:</p> <p>Will the project add to or alter these activities?</p>	<p>The project is on private land, with the flume and associated canal right-of-way managed for the delivery of irrigation water.</p> <p>Action Alternative: The project will have positive impacts on agriculture by allowing the continued use of the canal.</p> <p>No Action Alternative: Under this alternative there could be negative impacts to agricultural activities due to the risk of flume failure, which would make the canal inoperable.</p>

<p>16. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:</p> <p>Will the project create, move or eliminate jobs? If so, estimated number.</p>	<p>Action Alternative: Other than the employment related to the actual construction, the project will not create nor impact any jobs in the area.</p> <p>No Action Alternative: There will be no positive impacts to quantity and distribution of employment under this alternative.</p>
<p>17. LOCAL AND STATE TAX BASE AND TAX REVENUES:</p> <p>Will the project create or eliminate tax revenue?</p>	<p>Action Alternative: The project will have no impacts on the local and state tax base and tax revenues.</p> <p>No Action Alternative: There will be no impacts to the local and state tax base under this alternative.</p>
<p>18. DEMAND FOR GOVERNMENT SERVICES:</p> <p>Will substantial traffic be added to existing roads?</p> <p>Will other services (fire protection, police, schools, etc.) be needed?</p>	<p>Action Alternative: The project will not increase traffic nor add to demand for government services.</p> <p>No Action Alternative: Under this alternative there will be no additional demand for government services.</p>
<p>19. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:</p> <p>Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?</p>	<p>Action Alternative: There are no locally adopted environmental plans, goals, zoning or management plans that would be affected by the project.</p> <p>No Action Alternative: Under this alternative there will be no impacts on locally adopted environmental plans and goals.</p>
<p>20. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES:</p> <p>Is wilderness or recreational areas nearby or accessed through the project location?</p> <p>Is there recreational potential within the project location?</p>	<p>Action Alternative: The proposed flume replacement will not impact any recreation resources, as there is no legal public access to the project. There are no wilderness areas in the immediate vicinity of the project.</p> <p>No Action Alternative: There will be no impacts to the recreational resources.</p>

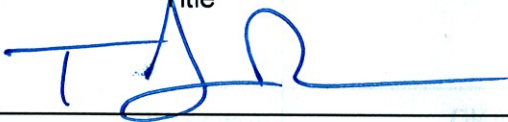
<p>21. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:</p> <p>Will the project add to the population and require additional housing?</p>	<p>Action Alternative: The project will not impact the density and distribution of population and housing.</p> <p>No Action Alternative: There will be no impacts to the density and distribution of population and housing.</p>
<p>22. SOCIAL STRUCTURES AND MORES:</p> <p>Is some disruption of native or traditional lifestyles or communities possible?</p>	<p>Action Alternative: The project will not disrupt any traditional lifestyles or communities.</p> <p>No Action Alternative: There will be no impacts to social structures under this alternative.</p>
<p>23. CULTURAL UNIQUENESS AND DIVERSITY:</p> <p>Will the action cause a shift in some unique quality of the area?</p>	<p>Action Alternative: The project will not impact the cultural uniqueness and diversity of this rural area.</p> <p>No Action Alternative: There will be no impacts to the cultural uniqueness and diversity under this alternative.</p>
<p>24. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:</p>	<p>Action Alternative: The flume replacement would maintain the delivery of irrigation water through the Cottonwood Canal, thereby helping to sustain the areas agricultural economy.</p> <p>No Action Alternative: There could be negative impacts to agricultural economic circumstances under this alternative should the canal become inoperable due to disrepair and deterioration of the flume.</p>

IV. FINDING

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| 25. ALTERNATIVE SELECTED: | Action alternative. |
| 26. SIGNIFICANCE OF POTENTIAL IMPACTS: | No significant impacts anticipated. |
| 27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:
<input type="checkbox"/> EIS <input type="checkbox"/> More Detailed EA <input checked="" type="checkbox"/> No Further Analysis | |

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EA Approved By: Tim Davis, DNRC Water Resources Division Administrator 6/27/16
Name Title


Signature Date: 6/27/16

Attachments: No attachments are included.

Additional Information:

This EA will be published for 30 days on the DNRC website at:

<http://dnrc.mt.gov/public-interest/environmental-docs>

Questions and comments should be directed to:

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Thank you for your interest.